

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 09-096705

(43) Date of publication of application : 08.04.1997

(51)Int.Cl.

G02B 5/02
// B32B 33/00

(21)Application number : 07-254036

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(22)Date of filing : 29.09.1995

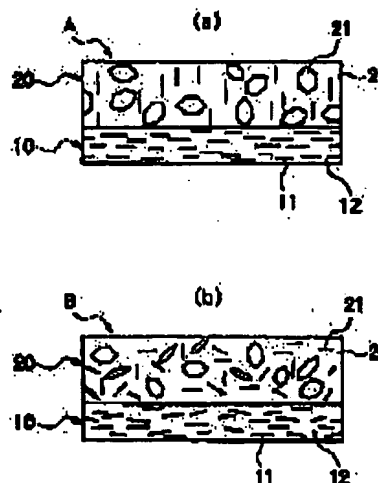
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(54) LIGHT DIFFUSION SHEET, EDGE LIGHT TYPE SURFACE LIGHT SOURCE USING THE SAME AND LIQUID CRYSTAL DISPLAY DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a light diffusion sheet which has high efficiency to both of reflected light and transmitted light and is less degraded in contrast by diagonal incident light.

SOLUTION: A light diffusion layer formed by using light reflective flaky foil pieces as light diffusing materials and dispersing these diffusing materials into a transparent resin layer is constituted dividedly to two layers. The orientation distribution at the bases of the foil pieces 11 in the light diffusion layer 10 on the side opposite to an observer side is set at such a distribution as to have a peak in the direction parallel with the front and rear side surfaces of the transparent resin layer 12. The orientation distribution at the bases of the foil pieces 21 in the light diffusion layer 20 on the observer side is set at the distribution at which the ratio of the foil pieces 21 parallel with the front and rear side surface of the transparent resin layer 22 is made lower than in the first light diffusion layer 10 and the ratio of the foil pieces 21 in a normal direction is made higher. The compatibility of the high diffusion reflectivity with the high diffusion transmittance is attained and the reflectivity is made relatively higher than the transmittance. Even more, the ratio at which the diagonal incident light entering from outside the visual field angle is reflected to the inside of the visual field angle is extremely low.



LEGAL STATUS

[Date of request for examination] 04.12.1995

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] 2772775

[Date of registration] 24.04.1998

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[Number of appeal against examiner's decision
of rejection]

[Date of requesting appeal against examiner's
decision of rejection]

[Date of extinction of right]

24.04.2001

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